

Masters Project Preparation

Assignment 4a and 4b

4A – CASE STATEMENT

Climate change in the world has caused extinction of a lot of flora species. According to scientists, by 2070 the lowest temperature on the earth will be the highest plants have ever experienced; therefore, the chances of their survival is really low. Losing plant species will cause various tragic results, including starvation.

Seed banks are institutions created to conserve and preserve plants of the world. Researchers register, study, conserve and genetically modify species of different plants; they want to make sure that the plants are able to survive the climate change and the ones which cannot be modified, are saved until the climate conditions go back to normal.

Because of various political, mechanical or economical reasons seed banks have failed in different countries, which resulted in losing the entire collection. By creating a network of seed banks, I would like to design a system which makes sure there is a backup collection in cases of failure; and later, by designing a prototype seed bank, I would like to propose a standard of the institutions, which can be used in different parts of the network. Modular system will allow the clients to construct the bank of a size appropriate to their needs.

4B – STAKEHOLDERS

- (Entire humanity of the world needing food from crops and other plants)
- (Entire fauna of the world needing shelter and food of specific plants)
- Ministries of agriculture of different countries owning seed banks
- People of the countries needing food
- Researchers
- Botanists